

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

**Ex parte** HIROTOMO KITAHARA, YASUAKI MATSUI, MASAKI KOROYASU,  
AKIRA OKUNO, KATSUSHIGE TSUKUYA, and DAIMON UEDA

Appeal No. 2005-0777  
Application No. 10/081,881

ON BRIEF

MAILED  
MAR 31 2005

PAT. & T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

Before KIMLIN, PAK, and WALTZ, **Administrative Patent Judges**.

WALTZ, **Administrative Patent Judge**.

**DECISION ON APPEAL**

This is a decision on an appeal from the primary examiner's final rejection of claims 1 through 8, which are the only claims pending in this application. We have jurisdiction pursuant to 35 U.S.C. § 134.

According to appellants, the invention is directed to a lamination apparatus for forming lamination layers of film on posters or advertising flyers, where the laminate film is provided as a sheet on a roll held on a shaft (Brief, page 2).

The claimed invention solves the problem of maintaining a good grip on the roll of laminate film under tension by providing a groove in the shaft, with a deformable flexible tube in the groove, so that the deformable flexible tube will touch the inside of the core of the roll of film to cause tight engagement between the roll and the shaft (Brief, pages 2-3).

Representative independent claim 1 and dependent claim 7 are reproduced below:

1. A lamination apparatus to form lamination layers of laminate film pasted on surfaces of printed matter, containing a shaft to support a core roll with films wound therearound, wherein said shaft has a cylindrical surface and an axial direction, said shaft having a groove on the cylindrical surface along the axial direction where a deformable tube and having two ends is set with both ends fixed by fittings.

7. The lamination apparatus according to claim 1, wherein said deformable tube comprises a soft vinyl.

In addition to the admitted prior art as shown in Figures 5 through 7, as described on pages 1-4 of the specification, the examiner has relied upon the following references as evidence of obviousness:

Hahn	3,606,187	Sep. 20, 1971
Kataoka	4,496,114	Jan. 29, 1985

The claims on appeal stand rejected under 35 U.S.C. § 103(a) as unpatentable over Hahn or Kataoka in view of the admitted

prior art as shown in Figures 5-7 and described on pages 1-4 of the specification (Answer, pages 3 and 4).<sup>1</sup> We reverse both rejections on appeal essentially for the reasons stated in the Brief, Reply Brief, and those set forth below. In addition, we enter two new grounds of rejection pursuant to the provisions of 37 CFR § 41.50(b) (effective Sep. 13, 2004; 69 Fed. Reg. 49960 (Aug. 12, 2004); 1286 Off. Gaz. Pat. Office 21 (Sep. 7, 2004)), as set forth in detail below.

#### **OPINION**

##### **A. The Rejections on Appeal**

The examiner finds that Hahn teaches a shaft 3 to support a core roll 25 with films wound around, where the shaft 3 has a groove 9 on a cylindrical surface along a longitudinal axial direction with a roller bar 17 set in the groove with both ends fixed by fittings 27 (Answer, page 3, citing Figures 1-4). Similarly, the examiner finds that Kataoka discloses a shaft 1 to support a core roll C with films wound around, where the shaft 1 has a groove 2, 11 on a cylindrical surface along a

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<sup>1</sup>In the interests of judicial economy, we have combined the two rejections on appeal for discussion purposes since both rejections involve the same claims, the same statutory basis, the same secondary reference (the admitted prior art), and rely on similar teachings from each primary reference (Answer, pages 3-5).

longitudinal axial direction with a roller, with axle inserted therein, in the groove and fixed by fittings 3 (Answer, page 4, citing Figure 9).

The examiner recognizes that neither Hahn nor Kataoka disclose a deformable tube of soft vinyl (Answer, page 4, first line; page 5, first line). The examiner finds that the admitted prior art teaches use of a rubber cord 82 "which can be deformable" (Answer, pages 4-6, citing the specification, page 3, l. 31). From these findings, the examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of appellants' invention "to use a deformable tube of soft vinyl" in the apparatus of Hahn or Kataoka since the admitted prior art teaches the use of a "soft material" and such a soft material "would function in a substantially equivalent manner in the claimed invention to prolong the life of [sic] expectancy of the tube and avoid damage to the wound material." Answer, page 4 (see also pages 5 and 6). The examiner further concludes that the "use of vinyl rather than rubber would have been an obvious choice of design" since there is no particular disclosed criticality to the material and either would function in substantially the same way (Answer, pages 4-6). We disagree.

As correctly argued by appellants (Brief, pages 5-8), both Hahn and Kataoka fail to disclose that the tube or roller is deformable, and neither suggest any desirability for the tube or roller to be deformable. Therefore appellants correctly argue that there is no motivation shown by the examiner to include the rubber cord of the admitted prior art into the device of either Hahn or Kataoka (Brief, page 7). See *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (The mere fact that the prior art could be so modified does not make the modification obvious unless the prior art suggested the desirability of the modification); *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (the showing of evidence of a motivation, suggestion or teaching to combine the references must be clear and particular).

Additionally, even assuming *arguendo* that the examiner established some motivation for using the rubber cord of the admitted prior art in the devices of Hahn and Kataoka, the examiner has not established any convincing reasoning or motivation for employing a "soft vinyl" tube instead of the rubber cord, as required by claims 4 and 7 (Brief, pages 8-9). The examiner's statement that use of vinyl rather than rubber would have been an "obvious choice of design" (Answer, pages 4-6)

is not supported by any evidence of record. See *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002).

For the foregoing reasons and those stated in the Brief and Reply Brief, we determine that the examiner has not established a *prima facie* case of obviousness in view of the reference evidence. Therefore we cannot sustain the examiner's rejections of claims 1-8 under 35 U.S.C. § 103(a) over Hahn or Kataoka in view of the admitted prior art as shown by Figures 5-7 and described on pages 1-4 of the specification.

*B. The New Grounds of Rejection*

Pursuant to the provisions of 37 CFR § 41.50(b), we enter the following new grounds of rejection:

(1) claims 4 and 7 are rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter appellants consider their invention. Claims 4 and 7 both recite that the deformable tube comprises a "soft vinyl." The legal standard for determining whether the language of a claim is definite under Section 112, paragraph two, is whether one of ordinary skill in this art would have been reasonably apprised of the scope of the claim, when read in light of the specification. See *In re Warmerdam*, 33 F.3d 1354, 1361, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). Appellants'

specification does not define or even exemplify any materials within the scope of the term "soft vinyl" (specification, page 4, l. 23; page 5, l. 28; and page 6, l. 35). The scope of the word "vinyl" may be defined as "[a]ny of various tough, flexible, and shiny plastics often used for coverings and clothing."<sup>2</sup> However, the word "soft" is a "word of degree" which is imprecise unless a definition or guideline has been set forth in the specification, or the term is otherwise well known in the art. See *Seattle Box Co. v. Industrial Crating & Packing, Inc.*, 731 F.2d 818, 826, 221 USPQ 568, 574 (Fed. Cir. 1984). There is no evidence on this record that the word "soft" has any art-recognized meaning and, as previously discussed, this word has not been defined or exemplified in the specification. Accordingly, we determine that one of ordinary skill in this art would not have been apprised of the scope of claims 4 and 7, when read in light of the specification. Therefore we determine that claims 4 and 7 are indefinite and fail to meet the requirement of the second paragraph of 35 U.S.C. § 112.

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<sup>2</sup>*Webster's II New Riverside University Dictionary*, p. 1289, The Riverside Publishing Co., 1984 (a copy is attached to this decision).

(2) claims 1, 6 and 8 are rejected under 35 U.S.C. § 102(b) over the admitted prior art as shown in Figures 5 through 7 and described on pages 1-4 of the specification. As described on pages 1-4 of the specification and shown in Figures 5-7, the admitted prior art or "conventional lamination apparatus" (specification, page 1, 11. 21-22) is considered to describe every limitation of claim 1 on appeal within the meaning of Section 102(b). This "conventional" apparatus comprises a shaft 8 supporting a core roll 83, with laminate film wound therearound, and said shaft having a groove 81 on the cylindrical surface along an axial direction where a rubber cord 82 is fitted with both ends fixed (specification, page 3, 1. 26-page 4, 1. 3; see also Figures 6-7). Therefore, if the rubber cord 82 is "a deformable tube" within the meaning of claim 1 on appeal, every claimed limitation is described by the admitted prior art within the meaning of 35 U.S.C. § 102(b). See *In re King*, 801 F.2d 1324, 1326-27, 231 USPQ 136, 138 (Fed. Cir. 1986).

Implicit in any analysis of a rejection under section 102(b) is that the claim must first be correctly construed to determine the proper meaning and scope of any contested limitation. See *Gechter v. Davidson*, 116 F.3d 1454, 1457, 43 USPQ2d 1030, 1032 (Fed. Cir. 1997). During examination proceedings, claim language

is given its broadest reasonable interpretation consistent with the specification. *See In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995). We determine that the broadest reasonable interpretation of "a deformable tube" is simply a tube structure that "is capable of being deformed" to any extent. We find no definition or guidelines in appellants' specification which would narrow the meaning of this term. It is clear from appellants' specification that rubber cords 82 are capable of deformation since they possess a "rebound force," although their "rebound force" is "weak" (specification, page 4, ll. 4-9). The examiner has also found that rubber cord 82 has a "deforming feature" (Answer, page 5, penultimate paragraph; see also page 4, ll. 3-4).

In view of the claim construction previously discussed, we determine that claim 1 on appeal is anticipated under 35 U.S.C. § 102(b) by the admitted prior art. Claims 6 and 8 are also included in this new ground of rejection. Claim 6 merely adds a limitation regarding the capability of the tube to deform, and this capability has been previously discussed. Claim 8 adds a limitation as to the intended use of the apparatus, and this limitation is not necessary to give meaning to the claim and

properly define the invention. See *In re Pearson*, 494 F.2d 1399, 1403, 181 USPQ 641, 644 (CCPA 1974); see also *In re Paulsen*, 30 F.3d 1475, 1479, 31 USPQ2d 1671, 1673-74 (Fed. Cir. 1994).

For the foregoing reasons, claims 1, 6 and 8 are rejected under 35 U.S.C. § 102(b) as anticipated by the admitted prior art (Figures 5-7, described on pages 1-4 of the specification).

We note that claim 2, and claims 3-5 dependent thereon, contains the additional limitation that a bar is inserted within the deformable tube. This limitation has not been described in the specification as "conventional" or part of the admitted prior art.

This decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 CFR § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

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37 CFR § 41.50(b) also provides that the appellants, *WITHIN TWO MONTHS FROM THE DATE OF THE DECISION*, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner . . . .

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record . . . .

**REVERSED - 37 CFR § 41.50(b)**

*Edward C. Kimlin*

EDWARD C. KIMLIN )  
Administrative Patent Judge )

*Chung K. Pak*

CHUNG K. PAK )  
Administrative Patent Judge )

BOARD OF PATENT  
APPEALS AND  
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*Thomas A. Waltz*

THOMAS A. WALTZ )  
Administrative Patent Judge )

TAW:hh

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